Monthly Oversight Report 54
ACS NPL Site
Griffith, Indiana
June 4, 2005 - July 1, 2005

BLACK & VEATCH

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Black & Veatch Special Projects Corp.

USEPA/RAC VII
American Chemical Services RAO (057-ROBF-05J7)

BVSPC Project 46526
BVSPC File C.3
July 15, 2005

Mr. Kevin Adler
U.S. Environmental Protection Agency
77 W. Jackson Boulevard (SR-6J)
Chicago, Illinois 60604-3590

Subject: Monthly Oversight Summary Report
No. 54 for June 2005

Dear Mr. Adler:

Enclosed is the Monthly Oversight Summary Report No. 54 for June 2005 for the American Chemical Services Superfund Site in Griffith, Indiana.

If you have any questions, please call (312-683-7856) or email (campbelllm@bv.com).

Sincerely,

BLACK & VEATCH Special Projects Corp.

Larry M. Campbell, P.E.
Site Manager

Enclosure

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Monthly Oversight Summary Report No. 54
ACS Superfund Site WA57, 46526.238

Reporting Period: Month of June (June 4 - July 1, 2005)
BVSPC O/S Dates: June 13 & 24, 2005 (Mr. Campbell)

Personnel Summary Affiliation	No. of Personnel	Responsibility
Montgomery Watson Harza	2	Respondent's General Contractor
U.S. Environmental Protection Agency	1	Federal Regulatory Agency
Black & Veatch Special Projects Corp.	1	USEPA Oversight Contractor
Austgen	1	General Contractor
Ryan Construction	2	Clearing Contractor
Microbac	1	GWTP Sampling Contractor

Construction Activities

Major Activities:

- Montgomery Watson Harza continued operating the groundwater treatment plant, the in-situ soil vapor extraction systems, and the air sparge systems.
- Ryan Construction cleared and grubbed the area near the northern site boundary for the Lower Aquifer investigation wells.
- Montgomery Watson Harza contracted for a firm to apply a herbicide to the pond west of the groundwater treatment plant to kill the existing algae bloom.
- Microbac (formerly Simalabs) collected samples from the groundwater treatment plant for routine process monitoring.
- Montgomery Watson Harza held the monthly operation status meeting on July 1.

Activities Performed:

Montgomery Watson Harza (MWH) reported (June 30) that the groundwater treatment plant (GWTP) was operational 98% of the time (29.5 of the 30 days) in June, processing 1,424,822 gallons of groundwater at average rates of 25 to 40 gpm. MWH reported that groundwater was being pumped to the GWTP from all trench and well sources during June.

MWH reported that the GWTP did not operate on June 15-16 for about 10 hours because of a power outage when a motorist hit a power pole on Colfax Avenue. The ACS manager telephoned the MWH

plant manager at home to alert him to this problem. MWH reported that one of the two GWTP air compressors was down for maintenance during the week of June 27. MWH reported that the dual-phase extraction (DPE) wells in the Still Bottoms Pond Area (SBPA) were shut down to minimize the load on the other air compressor. Microbac (formerly Simalabs) collected samples from the GWTP for routine process monitoring.

MWH reported that Fliteway was onsite on June 6 to install a larger fan to ventilate the noise-suppression housing on blower ME102. MWH also reported that it replaced the failed seal on blower ME102 and that blower ME102 is now supplying air to the aeration tank.

MWH continued to operate the On-Site Containment Area (ONCA) SBPA and Off-Site Containment Area (OFCA) in-situ soil vapor extraction (ISVE) systems and the OFCA and SBPA air sparge systems.

MWH reported that thermox 1 operated for 22 of the 30 days in the reporting period (73%), processing 1,000 cfm of vapors from the ONCA SBPA ISVE system, collecting vapors from 23 of the 46 ISVE wells. MWH reported that during the week of June 6, it replaced the recirculation pump and motor, calibrated the pH probe, cleaned the spray nozzles, and returned thermox 1 to operation. MWH reported a problem with a solenoid valve in the ONCA SBPA blower shed on July 1, but promptly repaired it and returned the blower to operations.

MWH reported that thermox 2 operated for 25 of the 30 days in the reporting period (83%), processing 2,000 cfm of vapors collected from 40 of the 42 OFCA ISVE wells and aeration tank T102. MWH reported that during the week of June 6, it replaced the recirculation pump on thermox 2 and resumed operations for about 1 week until the unit shut down because of a failed conductivity probe. MWH reported that it replaced the conductivity probe on June 14 and resumed operation of thermox 2.

MWH reported that operation of the GWTP continued while thermox 2 was out of service by routing the vapors from aeration tank T102 through thermox 1.

MWH reported replacing about 15 clear HDPE tubes in the OFCA blower shed to enhance performance of that unit. MWH expects to be able to draw vapors from all 42 OFCA ISVE wells in the near future.

MWH reported that it pumped 44 and 36 gallons of product from five ISVE wells in the SBPA on June 8 and 21, respectively. The product was manually transferred to the oil holding tank T6 in the GWTP. MWH reported that it had attempted to pump product from wells SVE61 and SVE65, but found the product to be highly viscous and non-pumpable. MWH reported that it had purchased a special pump to pump this highly viscous product from SVE61; if it is successful, a second pump will be purchased for SVE65.

MWH previously reported that it inspected all 21 SBPA DPE well pumps following the failure of the check valve on SVE46 in a previous reporting period. MWH reported that 14 of the DPE well pumps were operational, but that reduced functionality was observed in the remaining seven (including SVE61 and SVE65). These non-functioning pumps had been removed from the wells for repair or replacement and are currently stored in the sludge roll-off box in the GWTP. MWH reported that the new or repaired

pumps will be reinstalled with secondary check valves at all DPE well locations. MWH also reported revising the control logic such that DPE well pumps will shut off if adequate flow is not detected in the DPE well headers.

MWH reported that ACS had not reported a recurrence of odors in its break room on the SBPA.

MWH reported that Ryan Construction was onsite on June 14 to clear and grub the area near the northern site boundary for the Lower Aquifer investigation wells.

MWH reported that the pond west of the GWTP had an algae bloom and was overrun with algae. MWH reported it had retained an IDEM-licensed firm to apply herbicide to the pond on a biweekly basis to kill the algae. MWH reported that it is considering using barley straw placed in the pond next year to minimize algae growth.

MWH reported that it had received the results of the indoor air sampling from the basement of the residence at 1002 Reder Road. There were some low level detections of some chemicals. MWH proposed to conduct a second indoor air sampling event in September, but the EPA WAM suggested waiting until winter (say January).

MWH conducted the June operation & maintenance (O&M) status meeting at its Chicago office on July 1. BVSPC attended this meeting.

Because of the lack of field activity this month, no weekly reports or photographs are attached. Weekly reports and photographs will be prepared in the future if there are sufficient field activities to warrant such reporting. However, correspondence and log book notes of the daily activities are attached. BVSPC conducted oversight of the field activities on June 13 and 24.

Topics of Concern: None

Concern Resolution: None

Upcoming Activities:

- MWH to continue operating the GWTP and the OFCA and ONCA SBPA ISVE and air sparge systems.
- MWH to monitor odors in the ACS break room.
- MWH and Global to remediate the leaking tubes in thermox 2 heat exchanger.
- MWH to replace the ONCA SBPA DPE well pumps on July 13-15.
- MWH to conduct Phase 2 of the Lower Aquifer investigation and pumping test beginning July 25 (delayed from July 18).
- MWH and ISOTEC to conduct the third full-scale (about 200 points) chemical oxidation injection program in the South Area plume beginning on July 25.
- MWH will resume weekly construction coordination meetings at the site on July 28 (deferred from July 21) and continue weekly during the Lower Aquifer investigation and the chemical oxidation injections.

- Next O&M meeting was scheduled to occur at MWH's Chicago office at 10 AM on August 4, but will probably be held at the site if field operations are in progress.

Signature: Larry Campbell Date: July 14, 2005

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SYSTEMS STATUS MEETING AGENDA
JULY 1, 2005
AMERICAN CHEMICAL SERVICE, NPL SITE
GRIFFITH, INDIANA

MEETING DATE: Friday, July 1, 2005

MEETING TIME: 10:00

MEETING LOCATION: MWH Chicago Office
175 West Jackson Blvd., Suite 1900

TOPICS:

SITE STATUS

- Health and Safety Summary
- GWTP Status
- ISVE Systems Status (incl. Thermal Oxidizers)
- Interaction with ACS Facility or Community

CURRENT ISSUES

- Lower Aquifer Groundwater Investigation
- Third Full-scale Chemical Oxidation Treatment
- SBPA ISVE System Upgrades

MISCELLANEOUS

- Open

LOOK AHEAD

Field Events

- Lower Aquifer Groundwater Investigation – scheduled to begin July 12
- Third Full-scale Chemical Oxidation Treatment – tentative start July 25

Reports

- Monthly Status Report – July 10, 2005
- Quarterly Report, 4th Quarter 2004 – Response to Agency comments to be submitted in July 2005
- Quarterly Report, 1st Quarter 2005 – July 2005
- ISVE Systems O&M Manual – Further comments received; MWH will respond via email
- HASP Update – to be submitted in July 2005
- March 2005 Groundwater Monitoring Summary Report – June 30, 2005

Health & Safety Look Ahead

Future Meetings

CAD/CAS/JDP
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SITE STATUS MEETING MINUTES FOR JULY 1, 2005 MEETING AMERICAN CHEMICAL SERVICE, NPL SITE GRIFFITH, INDIANA

MEETING DATE: Friday, July 1, 2005

MEETING TIME: 10:00 a.m.

MEETING LOCATION: MWH Chicago Office

ATTENDEES:
Kevin Adler – U.S. EPA
Larry Campbell – Black & Veatch
Amy Clore – MWH
Chris Daly – MWH
Lee Orosz – MWH (by phone)
Jon Pohl - MWH
Chad Smith – MWH
Peter Vagt – MWH

TOPICS:

SITE STATUS

Health and Safety Summary

There have been no health and safety issues since the last meeting on June 3rd. Mosquitoes and wasps are numerous across the ACS site. Bug spray is recommended for personnel who will be working outside.

Groundwater Treatment Plant (GWTP) Status

Treatment rate through the GWTP varied between 25-40 gallons per minute (gpm) during June. The approximate total volume of water treated was 1,424,820 gallons. One of the two GWTP air compressors was serviced during the week of June 27th. To reduce the load on the other air compressor during this time, the dual-phase extraction (DPE) pumps in the SBPA were shut down. The solenoid valve located in the SBPA ISVE system building that controls air flow to the DPE pumps was also serviced at this time.

During the week of June 6th, Fliteway Technologies was on site and installed a new, larger ventilation fan to increase the air circulation through the housing around blower ME-102. On June 23rd, a new seal for blower ME-102 was installed.

On June 15th, a car hit a power pole on Colfax Street knocking out power to the ACS facility and the GWTP. ACS personnel notified Lee Orosz. Power was restored to the GWTP on June 16th. The system was down due to the power outage for approximately ten hours.

Off-Site Area/SBPA ISVE Systems

The SBPA ISVE System operated approximately 73 percent of the time during June, with 23 of the 46 wells active. The system was down due to various maintenance actions performed on Thermal Oxidizer 1 (TOX1). TOX1 was taken offline during the week of June 6th to replace the recirculation pump and motor and to clean the spray nozzles. The pH probe was also calibrated during this downtime.

The Off-Site ISVE System was operational approximately 83 percent of the time during June, with 40 of the 42 wells active. The PVC tubes that connect the ground to the manifold system in the blower shed were replaced on 10-15 wells. This will enable the 2 remaining ISVE wells to be activated at the next monitoring event, allowing the full ISVE field to be operational. The Off-Site system was shut down for maintenance activities associated with Thermal Oxidizer 2 (TOX2). TOX2 was taken offline during the week of June 6th while a new recirculation pump was installed. Immediately after the new pump was installed the conductivity probe failed. TOX2 was down for three days and a new conductivity probe was installed on June 14th. The unit began operating at 2000 cfm at this time. Product removal activities were performed weekly at five ISVE well locations in the SBPA.

MWH had previously evaluated the operation of the pneumatic pumps installed in the dual-phase extraction wells and discovered that seven of the 21 pumps were not functioning properly. On July 13th, MWH will install new or repaired pneumatic pumps in five of the 21 dual-phase extraction wells. One spare pneumatic pump has also been ordered and will be kept at the GWTP. In addition, new check valves will be installed at all dual-phase extraction wells to prevent backflow through the pumps.

The pneumatic pumps previously installed have not been efficient in removing liquid from the other two wells (SVE-61 and SVE-65). MWH has ordered one new air driven pump and will test the effectiveness of this pump at SVE-61. If the pump proves capable of removing the product from this location, a second pump will be ordered for SVE-65. The two pumps for SVE-61 and SVE-65 initially will not be tied into the DPE piping network. Instead, the extracted liquid will be collected in a drum and transported to the GWTP for treatment.

Interaction with Community

MWH is coordinating a meeting with Mr. Howard Anderson to demonstrate the effectiveness of the noise shield housing installed over Blower ME-102. MWH will notify the project team when a meeting date and time has been scheduled.

The results of the indoor air sampling event conducted at the residence at 1002 Reder Road have been received. MWH will include a copy of these results in the June ACS monthly status report. A second sampling event is tentatively scheduled during the winter months.

Lower Aquifer Investigation

Phase 2 of the Lower Aquifer Investigation is scheduled to begin on July 18th. MWH has received verbal approval of access rights to drill on railroad property and expects to have the signed access agreement prior to mobilization.

It is anticipated that the drilling will take ten days. MWH will conduct a sampling event one week after completion of the installation and development of the wells. MWH will conduct a pumping test three weeks after completion of the drilling event.

Chemical Oxidation Treatment Status

MWH conducted the post-application sampling event for the second full-scale chemical oxidation treatment from May 31st through June 3rd. Soil and groundwater samples were collected from 12 locations throughout the treatment area. MWH has received the results and they are currently being validated. MWH anticipates submitting a proposal to the Agencies by July 15th that lays out a plan for the third round of treatment. Based on the data received from the most recent post-application sampling event, MWH will propose to reduce the number of injection points to approximately 200-230 locations, focusing on areas with remaining high concentrations.

Pending Agency approval, work for the third round application is anticipated to begin the week of July 25th. Injections below Colfax Street are included as part of the plan. The same permit procedures will be followed as during the second full-scale application. Walsh and Kelly has been contacted and is available to assist with the traffic control. Groundwater elevations will continue to be monitored with the understanding that for optimal effect, the water table should be no lower than 631 feet.

SBPA ISVE System Upgrades

MWH continues to prepare for the construction of the upgrades to the SBPA ISVE System.

Miscellaneous

An RIDEM-certified company has been contracted to apply herbicide to mitigate the algal overgrowth in the pond. Applications are scheduled to occur every two weeks through the rest of the summer. MWH is considering alternative methods of treatment for next year.

LOOK AHEAD

Field Events

- Lower Aquifer Event, Drilling – mobilization on July 18
- Third Chemical Oxidation Treatment – July 25
- Installation of DPE Pumps and Check Valves – July 13-14

Health & Safety Look Ahead

- During this time of year, wasps and mosquitoes are a nuisance and a potential health risk at the site.
- Safety issues associated with the Lower Aquifer Investigation.

- Safety issues associated with the Chemical Oxidation Treatment, including traffic control.

Future Meetings

- Monthly Site Meeting – Thursday, July 21, 2005, 10 a.m. at the ACS Trailer
- With both the Lower Aquifer and Chemical Oxidation work, meetings will be occurring on a weekly basis starting on July 21st.

ALC/CAD/PJV
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Remedial Progress Report	June-05	Report Date: 6/30/2005

GWTP & Dewatering

The GWTP was operational for 29.5 days out of 30 days in June (98%).
Total Gallons treated = 1,424,822 gallons since 5/27/05 (28 days).

Tables, Graphs & Figures
Table - Effluent Summary
Graphs - Off-Site Dewatering
Graphs - SBPA Dewatering

SBPA ISVE System

System was operational 22 out of 30 days in June (73%).
System monitoring was conducted on 6/30/05.
The next monitoring event is scheduled for 7/20/05.

Tables, Graphs & Figures
Table - Sampling Data
Graph - Mass Extraction
Graph - Total VOC removal

Product Removal	6/2/2005	6/8/2005	6/21/2005
SVE-52	3 gal.	4 gal.	3 gal.
SVE-53	30 gal.	25 gal.	20 gal.
SVE-62	6 gal.	5 gal.	6 gal.
SVE-72	5 gal.	7 gal.	4 gal.
SVE-88	4 gal.	3 gal.	3 gal.
	48	44	36

Active Wells (23 of 46 total)	
SVE-43	SVE-67
SVE-45	SVE-68
SVE-47	SVE-70
SVE-48	SVE-71
SVE-55	SVE-74
SVE-56	SVE-75
SVE-57	SVE-76
SVE-58	SVE-83
SVE-59	SVE-85
SVE-60	SVE-86
SVE-63	SVE-87
SVE-64	

Off-Site ISVE System

System was operational 25 out of 30 days in June (83%).
System monitoring was conducted on 6/8/05.
The next monitoring event is scheduled for 7/20/05.

Tables, Graphs & Figures
Table - Sampling Data
Graph - Mass Extraction
Graph - Total VOC removal

Active Wells (40 of 42 total)	
SVE-01	SVE-22
SVE-02	SVE-23
SVE-03	SVE-24
SVE-04	SVE-25
SVE-05	SVE-26
SVE-06	SVE-27
SVE-07	SVE-28
SVE-08	SVE-29
SVE-09	SVE-30
SVE-10	SVE-31
SVE-11	SVE-32
SVE-12	SVE-33
SVE-13	SVE-34
SVE-15	SVE-36
SVE-16	SVE-37
SVE-17	SVE-38
SVE-18	SVE-39
SVE-19	SVE-40
SVE-20	SVE-41
SVE-21	SVE-42

Comments

Data presented here is for informational purposes only. Not all data presented in this report has been validated.

Table
Summary of Effluent Analytical Results
Groundwater Treatment System
American Chemical Service NPL Site
Griffith, Indiana

Event / Date	Month 94 3/15/2005	Month 95 4/11/2005	Month 96 5/19/2005	Effluent Limits	Lab Reporting Limits
pH	7.43 /J	7.25	8.18 /J	6-9	none
TSS	NS	1.00	NS	30	10
BOD	NS	< 2	NS	30	2
Arsenic	NS	11.4 /UB	NS	50	3.4
Beryllium	NS	2.7 B/UB	NS	NE	0.2
Cadmium	NS	2.6 B/B	NS	4.1	0.3
Manganese	NS	19.3 /B	NS	NE	10
Mercury	NS	ND	NS	0.02 (w/DL = 0.64)	0.64
Selenium	NS	ND	NS	8.2	4.3
Thallium	NS	3.5 B/UB	NS	NE	5.7
Zinc	NS	14.1 B/UB	NS	411	1.2
Benzene	ND	ND /UJ	0.50 U/	5	0.5
Acetone	2.2 JB/ 10 UBJ	1.9 J/J	2.8 B/ 10 UBJ	6,800	3
2-Butanone	ND	1.4 J/J	2.5 U/	210	3
Chloromethane	ND	ND /UJ	0.50 U/	NE	0.5
1,4-Dichlorobenzene	ND	ND /UJ	0.50 U/	NE	0.5
1,1-Dichloroethane	ND	ND /UJ	0.50 U/	NE	0.5
cis-1,2-Dichloroethene	ND	0.62 /J	0.50 U/	70	0.5
Ethylbenzene	ND	ND /UJ	0.50 U/	34	0.5
Methylene chloride	1.2 /J	2.3 /J	0.26 JB/ 10UB	5	0.6
Tetrachloroethene	ND	0.19 J/J	0.50 U/	5	0.5
Trichloroethene	ND	ND /UJ	0.50 U/	5	0.5
Vinyl chloride	0.36 J/J	0.16 J/J	0.50 U/	2	0.5
4-Methyl-2-pentanone	ND	ND /UJ	2.5 U/	15	3
bis (2-Chloroethyl) ether	NS	ND	NS	9.6	9.6
bis(2-Ethylhexyl) - phthalate	NS	ND	NS	6	6
4 - Methylphenol	NS	ND	NS	34	10
Isophorone	NS	ND	NS	50	10
Pentachlorophenol	NS	ND	NS	1	1
PCB/Aroclor-1016	NS	ND	NS	0.00056 (w/DL = 0.1 to 0.9)	0.5
PCB/Aroclor-1221	NS	ND	NS	0.00056 (w/DL = 0.1 to 0.9)	0.92*
PCB/Aroclor-1232	NS	ND	NS	0.00056 (w/DL = 0.1 to 0.9)	0.5
PCB/Aroclor-1242	NS	ND	NS	0.00056 (w/DL = 0.1 to 0.9)	0.5
PCB/Aroclor-1248	NS	ND	NS	0.00056 (w/DL = 0.1 to 0.9)	0.5
PCB/Aroclor-1254	NS	ND	NS	0.00056 (w/DL = 0.1 to 0.9)	0.5
PCB/Aroclor-1260	NS	ND	NS	0.00056 (w/DL = 0.1 to 0.9)	0.5

Notes:

Bolded result indicates a exceedence of the discharge limit
pH data is expressed in S.U.
Metals, VOC, SVOC and PCB data is expressed in ug/L
ND = Not detected
NS = This analyte was not sampled or analyzed for
NE = No effluent limit established.
DL = Detection limit
* = Approved SW-846 method is incapable of achieving effluent limit.

DRAFT VERSION
For Informational Purposes Only

Not all data presented here has been validated
Notes and suffix definitions have not been updated.

Suffix Definitions:

_/ = Data qualifier added by laboratory
/_ = Data qualifier added by data validator
J = Result is estimated
B = Compound is also detected in the blank
UJ = Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value
JB = Result is detected below the reporting limit and is an estimated concentration. The compound is also detected in the method blank resulting in a potential high bias
UB = Compound or analyte is not detected at or above the indicated concentration due to blank contamination
UBJ = Analyte is not detected at or above the indicated concentration due to blank contamination, however the calibration was out of range. Therefore the concentration is estimated.

CAD/
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Graph B
ME-101 Data

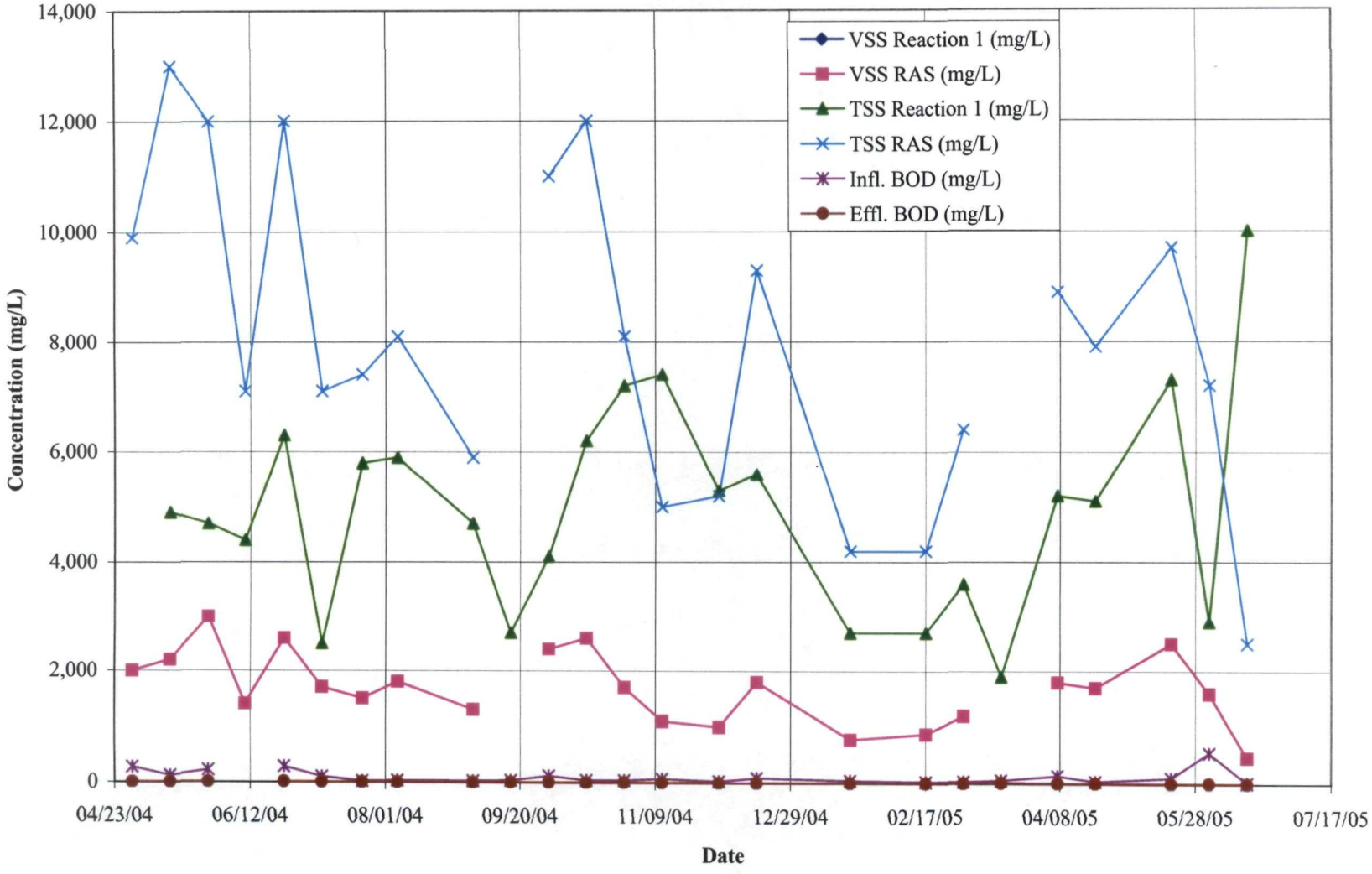
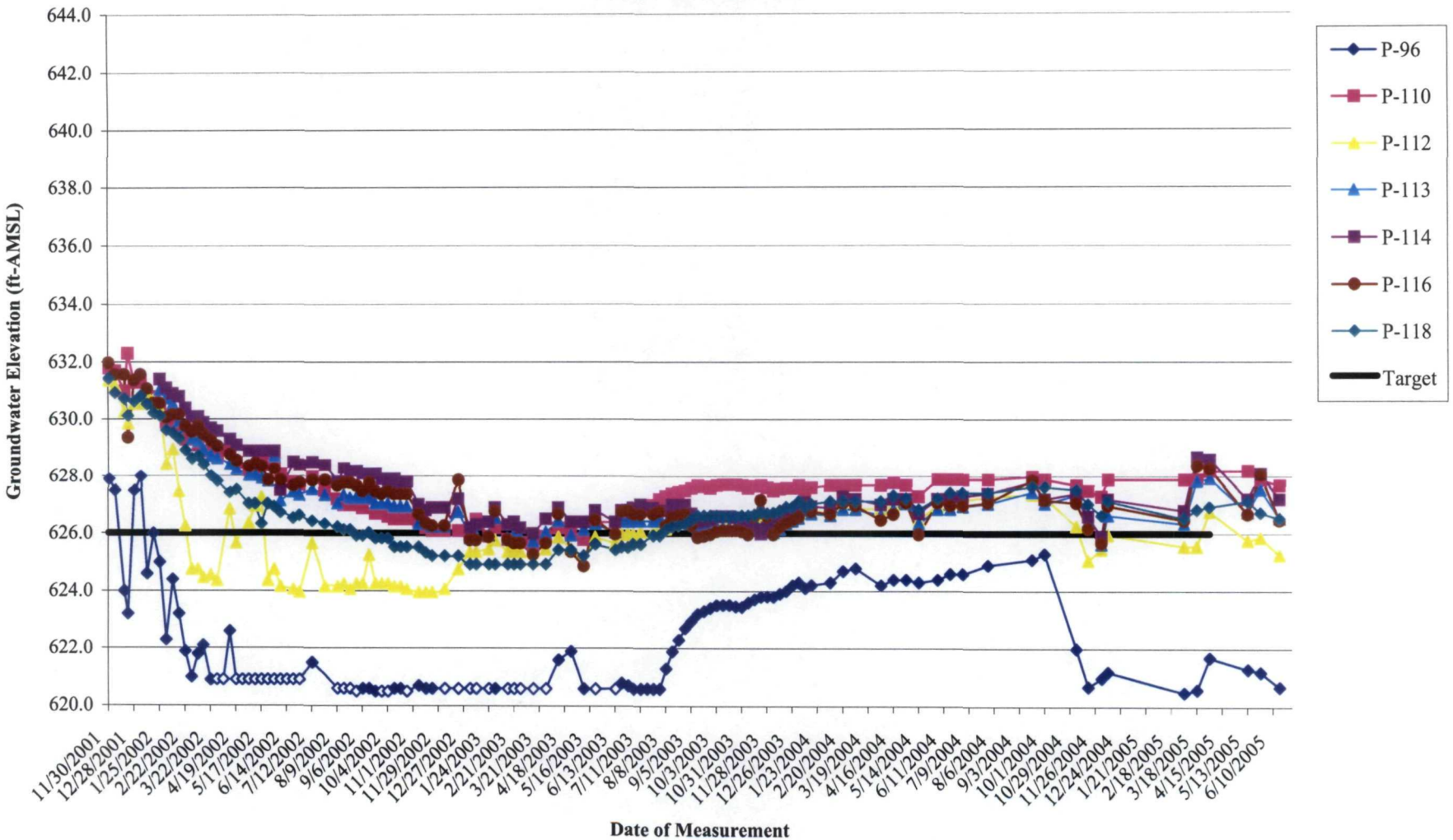


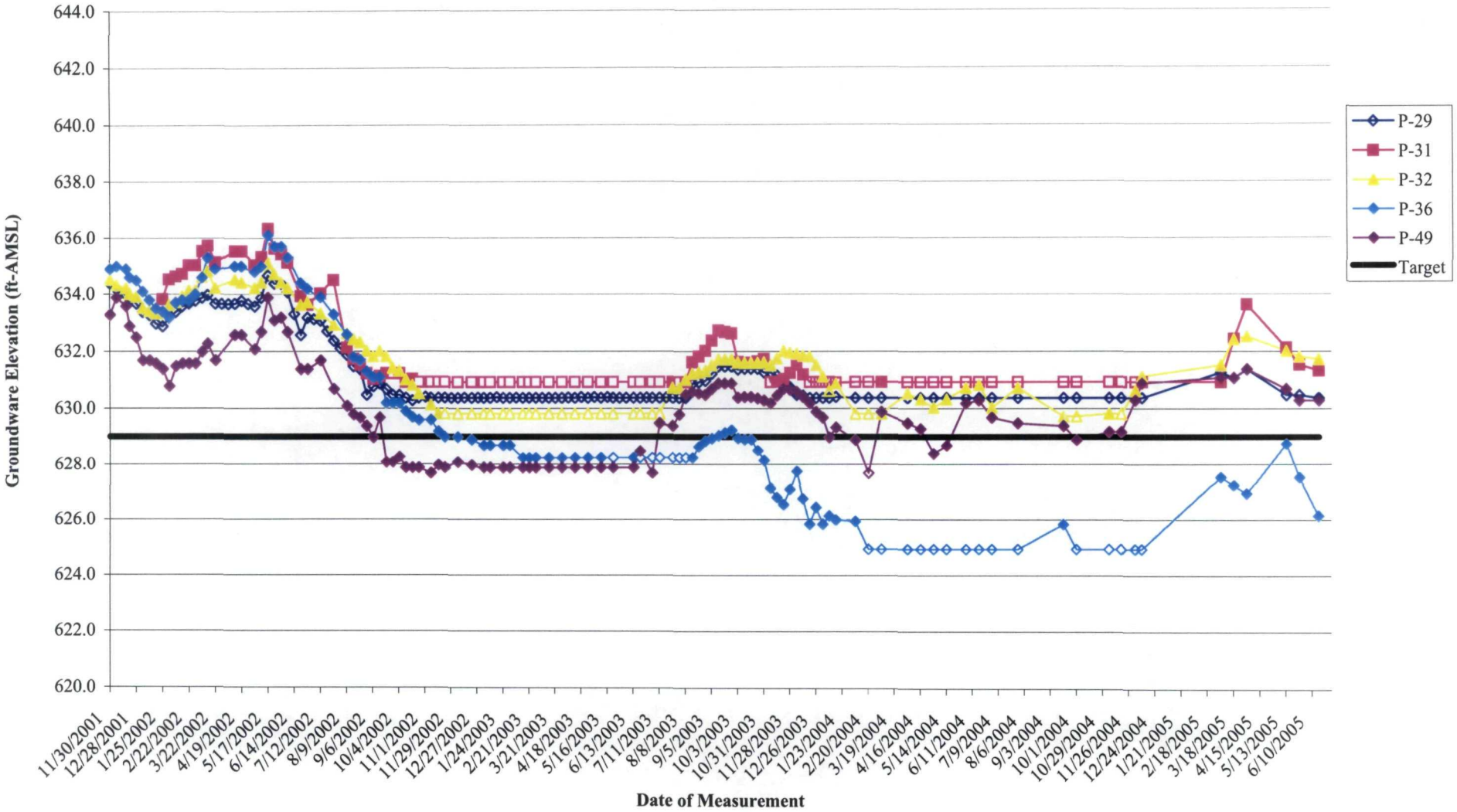
Figure 3
Off-Site Water Level Status - Piezometers
Groundwater Monitoring
ACS NPL Site
Griffith, Indiana



Note:
Hollow points represent dry piezometers
(data used for graphing purposes only). The bottom elevation of the piezometers may vary due to silting

ALC/jmf
J:/209/0603/0301/BWES and Dewatering Data/BWES Performance.2005.xls/Off-Site Chart

Figure 1
SBPA Water Level Status
ACS NPL Site
Griffith, Indiana



Note:
Hollow points represent dry piezometers (data used for graphing purposes only).
The bottom elevation of the piezometers may vary due to silting of the well or removal of silt.

ALC/jmf/CAD
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Table 10
SBPA and Off-Site ISVE System Results
for Method TO-14 (VOCs) - May 2005
American Chemical Service
Griffith, Indiana

		Sampled 5/19/2005			
Compounds	**Units**	**SBPA ISVE**		**Off-Site ISVE**	
1,1,1-Trichloroethane	ppbv	50,000		52,000	
1,1,2,2-Tetrachloroethane	ppbv	ND	U	ND	U
1,1,2-Trichloroethane	ppbv	270	J/J	270	J/J
1,1-Dichloroethane	ppbv	5,100		5,300	
1,1-Dichloroethene	ppbv	380	J/J	360	J/J
1,2-Dichloroethane	ppbv	1,700		1,800	
1,2-Dichloropropane	ppbv	470	J/J	470	J/J
2-Butanone (Methyl Ethyl Ketone)	ppbv	11,000		11,000	
2-Hexanone	ppbv	ND	U	ND	U
4-Methyl-2-pentanone	ppbv	7,200		7,700	
Acetone	ppbv	13,000		14,000	
Benzene	ppbv	33,000		34,000	
Bromodichloromethane	ppbv	ND	U	ND	U
Bromoform	ppbv	ND	U	ND	U
Bromomethane	ppbv	ND	U	ND	U
Carbon Disulfide	ppbv	ND	U	ND	U
Carbon Tetrachloride	ppbv	ND	U	ND	U
Chlorobenzene	ppbv	ND	U	ND	U
Chloroethane	ppbv	ND	U	ND	U
Chloroform	ppbv	3,700		3,900	
Chloromethane	ppbv	ND	U	ND	U
cis-1,2-Dichloroethene	ppbv	3,700		3,700	
cis-1,3-Dichloropropene	ppbv	ND	U	ND	U
Dibromochloromethane	ppbv	ND	U	ND	U
Ethyl Benzene	ppbv	20,000		21,000	
m,p-Xylene	ppbv	87,000		94,000	
Methylene Chloride	ppbv	35,000		36,000	
o-Xylene	ppbv	30,000		33,000	
Styrene	ppbv	1,700.00		1,900	
Tetrachloroethene	ppbv	40,000		42,000	
Toluene	ppbv	170,000		180,000	
trans-1,2-Dichloroethene	ppbv	ND	U	ND	U
trans-1,3-Dichloropropene	ppbv	ND	U	ND	U
Trichloroethene	ppbv	29,000		30,000	
Vinyl Chloride	ppbv	ND	U	360	J/J
Total	**ppbv**	**542,220**		**572,760**	
Total	**lb/hr**	**10.60**		**12.57**	

Notes:
_/ - Laboratory data qualifier
/_ - Data validation qualifier
NC - Not calculated
ND - Non-detect
ppbv - parts per billion volume
lb/hr - pounds per hour
5/19/05 VOCs in lb/hr calculated based on Offsite: 2000 scfm, 62 degrees Fahrenheit (5/20/05)
On-site: 1200 scfm, 70 degrees Fahrenheit (5/13/05)

Table 10
SBPA and Off-Site ISVE System Results
for Method TO-13 (SVOCs) - May 2005
American Chemical Service
Griffith, Indiana

		Sampled 5/19/2005			
Compounds	**Units**	**SBPA ISVE**		**OFF-Site ISVE**	
1,2,4-Trichlorobenzene	µg	1.3	J/J	1.6	J/J
1,2-Dichlorobenzene	µg	41		36	
1,3-Dichlorobenzene	µg	1.3	J/J	1.1	J/J
1,4-Dichlorobenzene	µg	5.2		4.5	J/J
2,4,5-Trichlorophenol	µg	ND	U	ND	U
2,4,6-Trichlorophenol	µg	ND	U	ND	U
2,4-Dichlorophenol	µg	ND	U	ND	U
2,4-Dimethylphenol	µg	0.68	J/J	1.5	J/J
2,4-Dinitrophenol	µg	ND	U	ND	U
2,4-Dinitrotoluene	µg	ND	U	ND	U
2,6-Dinitrotoluene	µg	ND	U	ND	U
2-Chloronaphthalene	µg	ND	U	ND	U
2-Chlorophenol	µg	ND	U	ND	U
2-Methylnaphthalene	µg	6.4		9	
2-Methylphenol (o-Cresol)	µg	ND	U	ND	U
2-Nitroaniline	µg	ND	U	ND	U
2-Nitrophenol	µg	ND	U	ND	U
3,3'-Dichlorobenzidine	µg	ND	U	ND	U
3-Nitroaniline	µg	ND	U	ND	U
4,6-Dinitro-2-methylphenol	µg	ND	U	ND	U
4-Bromophenyl-phenyl Ether	µg	ND	U	ND	U
4-Chloro-3-methylphenol	µg	ND	U	ND	U
4-Chloroaniline	µg	ND	U	ND	U
4-Chlorophenyl-phenyl Ether	µg	ND	U	ND	U
4-Methylphenol/3-Methylphenol	µg	1.3	J/J	2.6	J/J
4-Nitroaniline	µg	ND	U	ND	U
4-Nitrophenol	µg	ND	U	ND	U
Acenaphthene	µg	ND	U	ND	U
Acenaphthylene	µg	ND	U	ND	U
Anthracene	µg	ND	U	ND	U
Benzo(a)anthracene	µg	ND	U	ND	U
Benzo(a)pyrene	µg	ND	U	ND	U
Benzo(b)fluoranthene	µg	ND	U	ND	U
Benzo(g,h,i)perylene	µg	ND	U	ND	U
Benzo(k)fluoranthene	µg	ND	U	ND	U
bis(2-Chloroethoxy) Methane	µg	ND	U	ND	U
bis(2-Chloroethyl) Ether	µg	ND	U	ND	U
bis(2-Ethylhexyl)phthalate	µg	0.82	J/J	0.63	J/J
Butylbenzylphthalate	µg	ND	U	ND	U
Chrysene	µg	ND	U	ND	U
Dibenz(a,h)anthracene	µg	ND	U	ND	U
Dibenzofuran	µg	ND	U	ND	U
Diethylphthalate	µg	0.53	J/J	0.57	J/J
Dimethylphthalate	µg	ND	U	ND	U
di-n-Butylphthalate	µg	0.59	J/J	0.45	J/J
Di-n-Octylphthalate	µg	ND	U	ND	U
Fluoranthene	µg	ND	U	ND	U
Fluorene	µg	ND	U	ND	U
Hexachlorobenzene	µg	ND	U	ND	U
Hexachlorobutadiene	µg	2.9	J/J	3.1	J/J
Hexachlorocyclopentadiene	µg	0.79	J/J	0.41	J/J
Hexachloroethane	µg	ND	U	ND	U
Indeno(1,2,3-c,d)pyrene	µg	ND	U	ND	U
Isophorone	µg	20		26	
Naphthalene	µg	32		40	
Nitrobenzene	µg	ND	U	ND	U
N-Nitroso-di-n-propylamine	µg	ND	U	ND	U
N-Nitrosodiphenylamine	µg	ND	U	ND	U
Pentachlorophenol	µg	ND	U	ND	U
Phenanthrene	µg	ND	U	ND	U
Phenol	µg	ND	U	ND	U
Pyrene	µg	ND	U	ND	U
Total	µg	**114.8**		**127.46**	

Notes:

_/ - Laboratory data qualifier

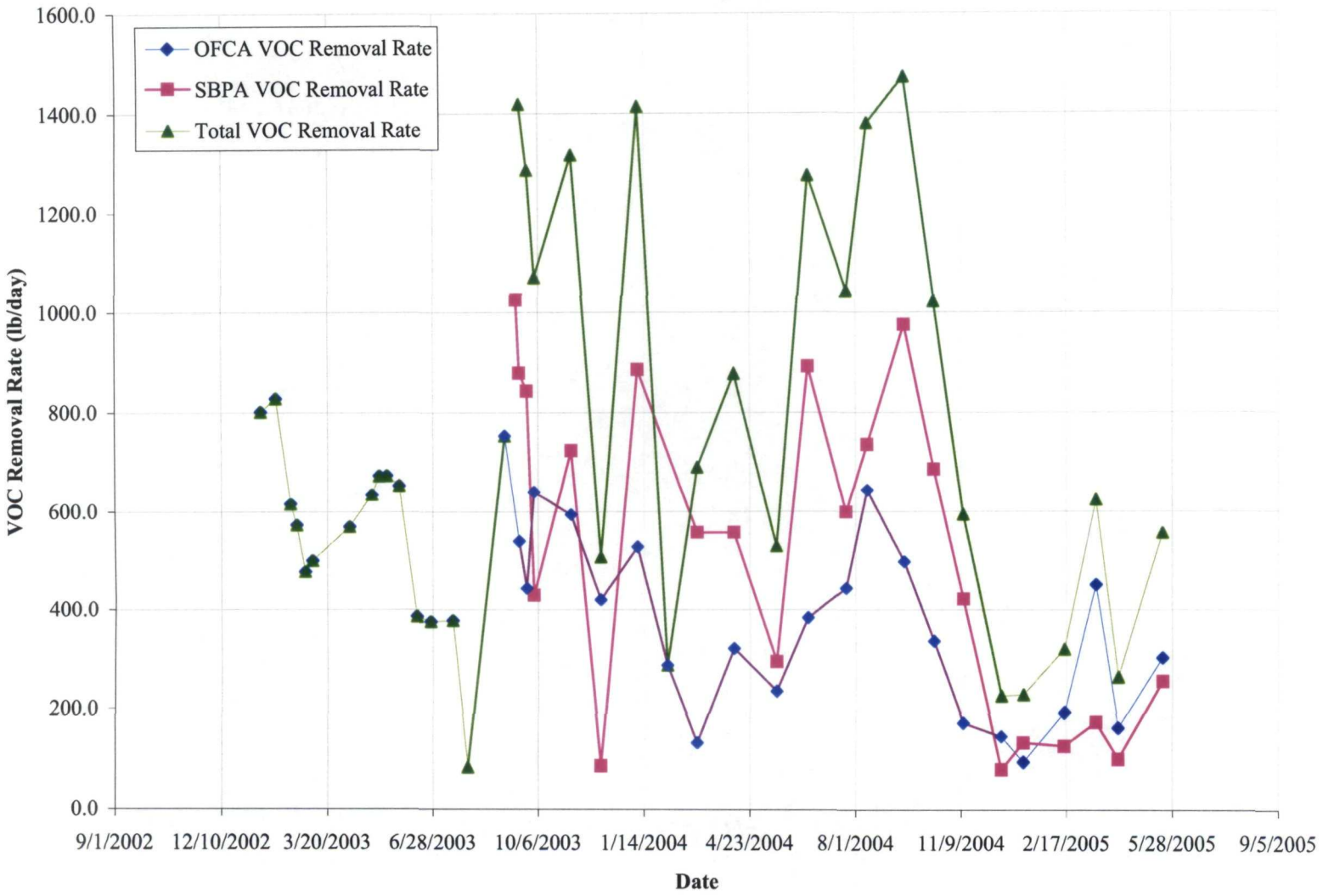
/_ - Data validation qualifier

µg - Microgram

NC - Not calculated

ND - Non-detect

VOC Removal Rate
American Chemical Services NPL Site, Griffith, IN



MBM/raa
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Total VOCs Removed
American Chemical Services NPL Site, Griffith, IN

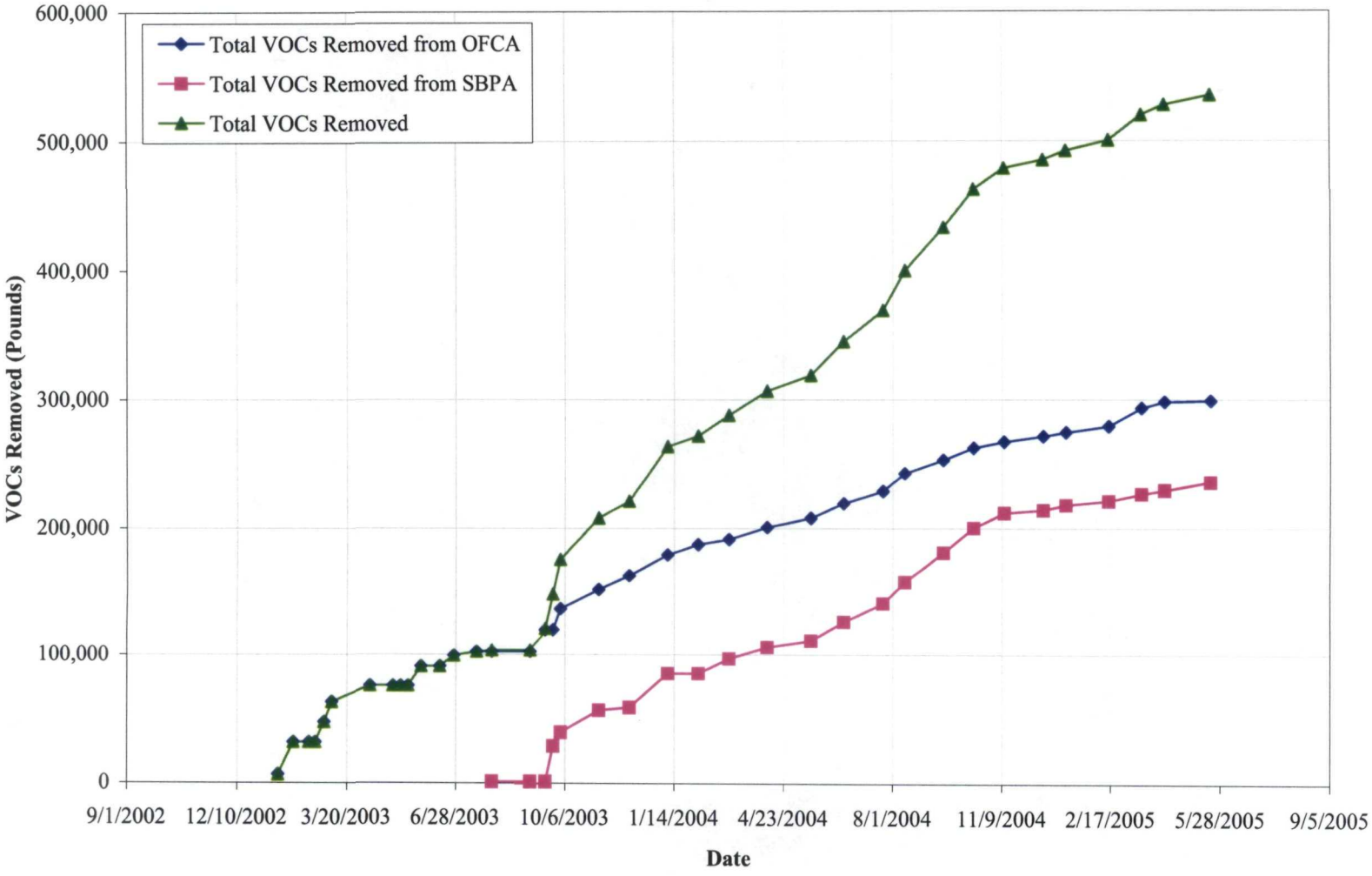

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Table 8
Thermal Oxidizer 1 Results for Method TO-14 (VOCs) - May 2005
American Chemical Service
Griffith, Indiana

		Not Sampled in May 2005					
		Therm-Ox 1			Destruction Efficiency		
Compounds	Units	Influent	Influent Dup	Effluent	Low	High	Average
1,1,1-Trichloroethane	ppbv	NS	NS	NS	NC	NC	NC
1,1,2,2-Tetrachloroethane	ppbv	NS	NS	NS	NC	NC	NC
1,1,2-Trichloroethane	ppbv	NS	NS	NS	NC	NC	NC
1,1-Dichloroethane	ppbv	NS	NS	NS	NC	NC	NC
1,1-Dichloroethene	ppbv	NS	NS	NS	NC	NC	NC
1,2-Dichloroethane	ppbv	NS	NS	NS	NC	NC	NC
1,2-Dichloropropane	ppbv	NS	NS	NS	NC	NC	NC
2-Butanone (Methyl Ethyl Ketone)	ppbv	NS	NS	NS	NC	NC	NC
2-Hexanone	ppbv	NS	NS	NS	NC	NC	NC
4-Methyl-2-pentanone	ppbv	NS	NS	NS	NC	NC	NC
Acetone	ppbv	NS	NS	NS	NC	NC	NC
Benzene	ppbv	NS	NS	NS	NC	NC	NC
Bromodichloromethane	ppbv	NS	NS	NS	NC	NC	NC
Bromoform	ppbv	NS	NS	NS	NC	NC	NC
Bromomethane	ppbv	NS	NS	NS	NC	NC	NC
Carbon Disulfide	ppbv	NS	NS	NS	NC	NC	NC
Carbon Tetrachloride	ppbv	NS	NS	NS	NC	NC	NC
Chlorobenzene	ppbv	NS	NS	NS	NC	NC	NC
Chloroethane	ppbv	NS	NS	NS	NC	NC	NC
Chloroform	ppbv	NS	NS	NS	NC	NC	NC
Chloromethane	ppbv	NS	NS	NS	NC	NC	NC
cis-1,2-Dichloroethene	ppbv	NS	NS	NS	NC	NC	NC
cis-1,3-Dichloropropene	ppbv	NS	NS	NS	NC	NC	NC
Dibromochloromethane	ppbv	NS	NS	NS	NC	NC	NC
Ethyl Benzene	ppbv	NS	NS	NS	NC	NC	NC
m,p-Xylene	ppbv	NS	NS	NS	NC	NC	NC
Methylene Chloride	ppbv	NS	NS	NS	NC	NC	NC
o-Xylene	ppbv	NS	NS	NS	NC	NC	NC
Styrene	ppbv	NS	NS	NS	NC	NC	NC
Tetrachloroethene	ppbv	NS	NS	NS	NC	NC	NC
Toluene	ppbv	NS	NS	NS	NC	NC	NC
trans-1,2-Dichloroethene	ppbv	NS	NS	NS	NC	NC	NC
trans-1,3-Dichloropropene	ppbv	NS	NS	NS	NC	NC	NC
Trichloroethene	ppbv	NS	NS	NS	NC	NC	NC
Vinyl Chloride	ppbv	NS	NS	NS	NC	NC	NC
Total	**ppbv**	**0**	**0**	**0.00**	**NC**	**NC**	**NC**
Total	**lb/hr**	**0.00**	**0.00**	**0.000**	**NC**	**NC**	**NC**

Notes:
_/ - Laboratory data qualifier
/_ - Data validation qualifier
NC - Not calculated
ND - Non-detect
NS - Not sampled
ppbv - parts per billion volume
lb/hr - pounds per hour
Destruction efficiencies were not calculated if the either influent samples or the effluent sample was estimated.
Destruction efficiencies were also not calculated if the effluent result exceeded either influent result.

Qualifiers:
J - Result is estimated
U - below reported quantitation limit

Table 9
Thermal Oxidizer 1 Results for Method TO-13 (SVOCs) - May 2005
American Chemical Service
Griffith, Indiana

		Not Sampled May 2005					
		Therm-Ox 1			Destruction Efficiency		
Compounds	Units	Influent	Influent Dup	Effluent	Low	High	Average
1,2,4-Trichlorobenzene	µg	NS	NS	NS	NC	NC	NC
1,2-Dichlorobenzene	µg	NS	NS	NS	NC	NC	NC
1,3-Dichlorobenzene	µg	NS	NS	NS	NC	NC	NC
1,4-Dichlorobenzene	µg	NS	NS	NS	NC	NC	NC
2,4,5-Trichlorophenol	µg	NS	NS	NS	NC	NC	NC
2,4,6-Trichlorophenol	µg	NS	NS	NS	NC	NC	NC
2,4-Dichlorophenol	µg	NS	NS	NS	NC	NC	NC
2,4-Dimethylphenol	µg	NS	NS	NS	NC	NC	NC
2,4-Dinitrophenol	µg	NS	NS	NS	NC	NC	NC
2,4-Dinitrotoluene	µg	NS	NS	NS	NC	NC	NC
2,6-Dinitrotoluene	µg	NS	NS	NS	NC	NC	NC
2-Chloronaphthalene	µg	NS	NS	NS	NC	NC	NC
2-Chlorophenol	µg	NS	NS	NS	NC	NC	NC
2-Methylnaphthalene	µg	NS	NS	NS	NC	NC	NC
2-Methylphenol (o-Cresol)	µg	NS	NS	NS	NC	NC	NC
2-Nitroaniline	µg	NS	NS	NS	NC	NC	NC
2-Nitrophenol	µg	NS	NS	NS	NC	NC	NC
3,3'-Dichlorobenzidine	µg	NS	NS	NS	NC	NC	NC
3-Nitroaniline	µg	NS	NS	NS	NC	NC	NC
4,6-Dinitro-2-methylphenol	µg	NS	NS	NS	NC	NC	NC
4-Bromophenyl-phenyl Ether	µg	NS	NS	NS	NC	NC	NC
4-Chloro-3-methylphenol	µg	NS	NS	NS	NC	NC	NC
4-Chloroaniline	µg	NS	NS	NS	NC	NC	NC
4-Chlorophenyl-phenyl Ether	µg	NS	NS	NS	NC	NC	NC
4-Methylphenol/3-Methylphenol	µg	NS	NS	NS	NC	NC	NC
4-Nitroaniline	µg	NS	NS	NS	NC	NC	NC
4-Nitrophenol	µg	NS	NS	NS	NC	NC	NC
Acenaphthene	µg	NS	NS	NS	NC	NC	NC
Acenaphthylene	µg	NS	NS	NS	NC	NC	NC
Anthracene	µg	NS	NS	NS	NC	NC	NC
Benzo(a)anthracene	µg	NS	NS	NS	NC	NC	NC
Benzo(a)pyrene	µg	NS	NS	NS	NC	NC	NC
Benzo(b)fluoranthene	µg	NS	NS	NS	NC	NC	NC
Benzo(g,h,i)perylene	µg	NS	NS	NS	NC	NC	NC
Benzo(k)fluoranthene	µg	NS	NS	NS	NC	NC	NC
bis(2-Chloroethoxy) Methane	µg	NS	NS	NS	NC	NC	NC
bis(2-Chloroethyl) Ether	µg	NS	NS	NS	NC	NC	NC
bis(2-Ethylhexyl)phthalate	µg	NS	NS	NS	NC	NC	NC
Butylbenzylphthalate	µg	NS	NS	NS	NC	NC	NC
Chrysene	µg	NS	NS	NS	NC	NC	NC
Dibenz(a,h)anthracene	µg	NS	NS	NS	NC	NC	NC
Dibenzofuran	µg	NS	NS	NS	NC	NC	NC
Diethylphthalate	µg	NS	NS	NS	NC	NC	NC
Dimethylphthalate	µg	NS	NS	NS	NC	NC	NC
di-n-Butylphthalate	µg	NS	NS	NS	NC	NC	NC
Di-n-Octylphthalate	µg	NS	NS	NS	NC	NC	NC
Fluoranthene	µg	NS	NS	NS	NC	NC	NC
Fluorene	µg	NS	NS	NS	NC	NC	NC
Hexachlorobenzene	µg	NS	NS	NS	NC	NC	NC
Hexachlorobutadiene	µg	NS	NS	NS	NC	NC	NC
Hexachlorocyclopentadiene	µg	NS	NS	NS	NC	NC	NC
Hexachloroethane	µg	NS	NS	NS	NC	NC	NC
Indeno(1,2,3-c,d)pyrene	µg	NS	NS	NS	NC	NC	NC
Isophorone	µg	NS	NS	NS	NC	NC	NC
Naphthalene	µg	NS	NS	NS	NC	NC	NC
Nitrobenzene	µg	NS	NS	NS	NC	NC	NC
N-Nitroso-di-n-propylamine	µg	NS	NS	NS	NC	NC	NC
N-Nitrosodiphenylamine	µg	NS	NS	NS	NC	NC	NC
Pentachlorophenol	µg	NS	NS	NS	NC	NC	NC
Phenanthrene	µg	NS	NS	NS	NC	NC	NC
Phenol	µg	NS	NS	NS	NC	NC	NC
Pyrene	µg	NS	NS	NS	NC	NC	NC
Total	µg	NA	NA	NA	NC	NC	NC

Notes:
_/ - Laboratory data qualifier
/_ - Data validation qualifier
µg - Microgram
ND - Non-detect
NS - Not sampled
NA - Not applicable

Qualifiers:
J - Result is estimated
U - Below reported quantitation limit

Table 10
Thermal Oxidizer 2 Results for Method TO-14 (VOCs) - May 2005
American Chemical Service
Griffith, Indiana

		Sampled 05/19/05								
		Therm-Ox 2						Destruction Efficiency		
Compounds	Units	Influent		Influent Dup		Effluent		Low	High	Average
1,1,1-Trichloroethane	ppbv	41,000		50,000		1,400		96.59%	97.20%	96.89%
1,1,2,2-Tetrachloroethane	ppbv	ND	U	ND	U	ND	U	NC	NC	NC
1,1,2-Trichloroethane	ppbv	230	J/J	260	J/J	7.1	J/J	NC	NC	NC
1,1-Dichloroethane	ppbv	4,300		5,200		140		96.74%	97.31%	97.03%
1,1-Dichloroethene	ppbv	320	J/J	390	J/J	210		NC	NC	NC
1,2-Dichloroethane	ppbv	1,300		1,600		45		96.54%	97.19%	96.86%
1,2-Dichloropropane	ppbv	340	J/J	430	J/J	12.0	J/J	NC	NC	NC
2-Butanone (Methyl Ethyl Ketone)	ppbv	10,000		11,000		300		97.00%	97.27%	97.14%
2-Hexanone	ppbv	ND	U	ND	U	7.6	J/J	NC	NC	NC
4-Methyl-2-pentanone	ppbv	6,100		7,500		120		98.03%	98.40%	98.22%
Acetone	ppbv	12,000		14,000		580		95.17%	95.86%	95.51%
Benzene	ppbv	27,000		32,000		1,200		95.56%	96.25%	95.90%
Bromodichloromethane	ppbv	ND	U	ND	U	ND	U	NC	NC	NC
Bromoform	ppbv	ND	U	ND	U	ND	U	NC	NC	NC
Bromomethane	ppbv	ND	U	ND	U	ND	U	NC	NC	NC
Carbon Disulfide	ppbv	ND	U	ND	U	3	J/J	NC	NC	NC
Carbon Tetrachloride	ppbv	ND	U	ND	U	ND	U	NC	NC	NC
Chlorobenzene	ppbv	ND	U	ND	U	5.8	J/J	NC	NC	NC
Chloroethane	ppbv	ND	U	ND	U	ND	U	NC	NC	NC
Chloroform	ppbv	3,100		3,700		110		96.45%	97.03%	96.74%
Chloromethane	ppbv	ND	U	ND	U	26	J/J	NC	NC	NC
cis-1,2-Dichloroethene	ppbv	3,200		3,800		210		93.44%	94.47%	93.96%
cis-1,3-Dichloropropene	ppbv	ND	U	ND	U	ND	U	NC	NC	NC
Dibromochloromethane	ppbv	ND	U	ND	U	ND	U	NC	NC	NC
Ethyl Benzene	ppbv	16,000		20,000		350		97.81%	98.25%	98.03%
m,p-Xylene	ppbv	71,000		88,000		1,300		98.17%	98.52%	98.35%
Methylene Chloride	ppbv	29,000		35,000		1,100		96.21%	96.86%	96.53%
o-Xylene	ppbv	25,000		31,000		480		98.08%	98.45%	98.27%
Styrene	ppbv	1,500		1,700		70		95.33%	95.88%	95.61%
Tetrachloroethene	ppbv	32,000		41,000		1,300		95.94%	96.83%	96.38%
Toluene	ppbv	140,000		170,000		3,800		97.29%	97.76%	97.53%
trans-1,2-Dichloroethene	ppbv	ND	U	ND	U	16	J/J	NC	NC	NC
trans-1,3-Dichloropropene	ppbv	ND	U	ND	U	ND	U	NC	NC	NC
Trichloroethene	ppbv	23,000		29,000		860		96.26%	97.03%	96.65%
Vinyl Chloride	ppbv	240	J/J	360	J/J	46		NC	NC	NC
Total	**ppbv**	**446,630**		**545,940**		**13,699**		**96.93%**	**97.49%**	**97.21%**
Total	**lb/hr**	**14.49**		**17.79**		**0.445**		**96.93%**	**97.50%**	**97.21%**

Notes:

_/ - Laboratory data qualifier

/_ - Data validation qualifier

NC - Not calculated

ND - Non-detect

ppbv - parts per billion volume

lb/hr - pounds per hour

Qualifiers:

J - Result is estimated

U - below reported quantitation limit

5/19/05 VOCs in lb/hr calculated based on Offsite: 2000 scfm, 62 degrees Fahrenheit (5/20/05),On-site: 1200 scfm, 70 degrees Fahrenheit (5/13/05)

Therm-Ox VOC lb/hr based on assumption of 70 degrees Fahrenheit

Destruction efficiencies were not calculated if either influent or effluent samples were estimated.

Destruction efficiencies were also not calculated if the effluent result exceeded either influent result.

Table 11
Thermal Oxidizer 2 Results for Method TO-13 (SVOCs) - May 2005
American Chemical Service
Griffith, Indiana

		Sampled 5/19/05								
		Therm-Ox 2						Destruction Efficiency		
Compounds	Units	Influent		Influent Dup		Effluent		Low	High	Average
1,2,4-Trichlorobenzene	µg	1.6	J/J	1.5	J/J	ND	U	NC	NC	NC
1,2-Dichlorobenzene	µg	48		38		1.9	J/J	NC	NC	NC
1,3-Dichlorobenzene	µg	1.6	J/J	1.2	J/J	ND	U	NC	NC	NC
1,4-Dichlorobenzene	µg	6.2		5	J/J	ND	U	NC	NC	NC
2,4,5-Trichlorophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
2,4,6-Trichlorophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
2,4-Dichlorophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
2,4-Dimethylphenol	µg	1.2	J/J	0.89	J/J	ND	U	NC	NC	NC
2,4-Dinitrophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
2,4-Dinitrotoluene	µg	ND	U	ND	U	ND	U	NC	NC	NC
2,6-Dinitrotoluene	µg	ND	U	ND	U	ND	U	NC	NC	NC
2-Chloronaphthalene	µg	ND	U	ND	U	ND	U	NC	NC	NC
2-Chlorophenol	µg	ND	U	ND	U	0.67	J	NC	NC	NC
2-Methylnaphthalene	µg	7.6		6		0.28	J	NC	NC	NC
2-Methylphenol (o-Cresol)	µg	ND	U	ND	U	ND	U	NC	NC	NC
2-Nitroaniline	µg	ND	U	ND	U	ND	U	NC	NC	NC
2-Nitrophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
3,3'-Dichlorobenzidine	µg	ND	U	ND	U	ND	U	NC	NC	NC
3-Nitroaniline	µg	ND	U	ND	U	ND	U	NC	NC	NC
4,6-Dinitro-2-methylphenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
4-Bromophenyl-phenyl Ether	µg	ND	U	ND	U	ND	U	NC	NC	NC
4-Chloro-3-methylphenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
4-Chloroaniline	µg	ND	U	ND	U	ND	U	NC	NC	NC
4-Chlorophenyl-phenyl Ether	µg	ND	U	ND	U	ND	U	NC	NC	NC
4-Methylphenol/3-Methylphenol	µg	2.2	J/J	1.7	J/J	ND	U	NC	NC	NC
4-Nitroaniline	µg	ND	U	ND	U	ND	U	NC	NC	NC
4-Nitrophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
Acenaphthene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Acenaphthylene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Anthracene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Benzo(a)anthracene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Benzo(a)pyrene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Benzo(b)fluoranthene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Benzo(g,h,i)perylene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Benzo(k)fluoranthene	µg	ND	U	ND	U	ND	U	NC	NC	NC
bis(2-Chloroethoxy) Methane	µg	ND	U	ND	U	ND	U	NC	NC	NC
bis(2-Chloroethyl) Ether	µg	ND	U	ND	U	ND	U	NC	NC	NC
bis(2-Ethylhexyl)phthalate	µg	1	J/J	3.9	J/J	0.82	J/J	NC	NC	NC
Butylbenzylphthalate	µg	ND	U	ND	U	ND	U	NC	NC	NC
Chrysene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Dibenz(a,h)anthracene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Dibenzofuran	µg	ND	U	ND	U	ND	U	NC	NC	NC
Diethylphthalate	µg	0.66	J/J	0.61	J/J	0.34	J/J	NC	NC	NC
Dimethylphthalate	µg	ND	U	ND	U	ND	U	NC	NC	NC
di-n-Butylphthalate	µg	0.64	J/J	0.78	J/J	0.41	J/J	NC	NC	NC
Di-n-Octylphthalate	µg	ND	U	ND	U	ND	U	NC	NC	NC
Fluoranthene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Fluorene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Hexachlorobenzene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Hexachlorobutadiene	µg	4	J/J	2.9	J/J	ND	U	NC	NC	NC
Hexachlorocyclopentadiene	µg	1.1	J/J	0.81	J/J	ND	U	NC	NC	NC
Hexachloroethane	µg	ND	U	ND	U	ND	U	NC	NC	NC
Indeno(1,2,3-c,d)pyrene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Isophorone	µg	31		23		ND	U	100.00%	100.00%	100.00%
Naphthalene	µg	44		35		2.1	J/J	NC	NC	NC
Nitrobenzene	µg	ND	U	ND	U	ND	U	NC	NC	NC
N-Nitroso-di-n-propylamine	µg	ND	U	ND	U	ND	U	NC	NC	NC
N-Nitrosodiphenylamine	µg	ND	U	ND	U	ND	U	NC	NC	NC
Pentachlorophenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
Phenanthrene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Phenol	µg	ND	U	ND	U	ND	U	NC	NC	NC
Pyrene	µg	ND	U	ND	U	ND	U	NC	NC	NC
Total	µg	**150.8**		**121.3**		**6.5**		**94.62%**	**95.68%**	**95.15%**

Notes:
_/ - Laboratory data qualifier
/_ - Data validation qualifier
µg - Microgram
NC - Not calculated
ND - Non-detect

Qualifiers:
J - Result is estimated
U - Below reported quantitation limit

(24)

13 June 05

1430 Arrive onsite

Overcast - rain - warm

Personnel Onsite

Lee Orosz MWH

Tim Kirkland Arcadis

Larry Campbell BVSR

D/w Lee

- GWTP running OK
- Thermax 1 - replaced recirculation pump & motor. Vapors from SBPA & T-102. at 100 CFM from 23 ISVE wells
- Thermax 2 down - conductivity probe went bad - new one on order due tomorrow. Replaced recirc. Motor & pump. Pulling from 46 ISVE wells
- ISVE DPE pumps - Will repair 2 & replace 4 pumps.
- Ryan to clear & grub area for Lower aquifer inj. pump test area.

1505 Left site for day

LM Campbell

(25)

24 June 05

1500 Arrive On Site

Clear calm Hot 95°F

No one was onsite when I arrived. Gates were locked. So, could not inspect the operations.

1505 Left Site for day

LM Campbell